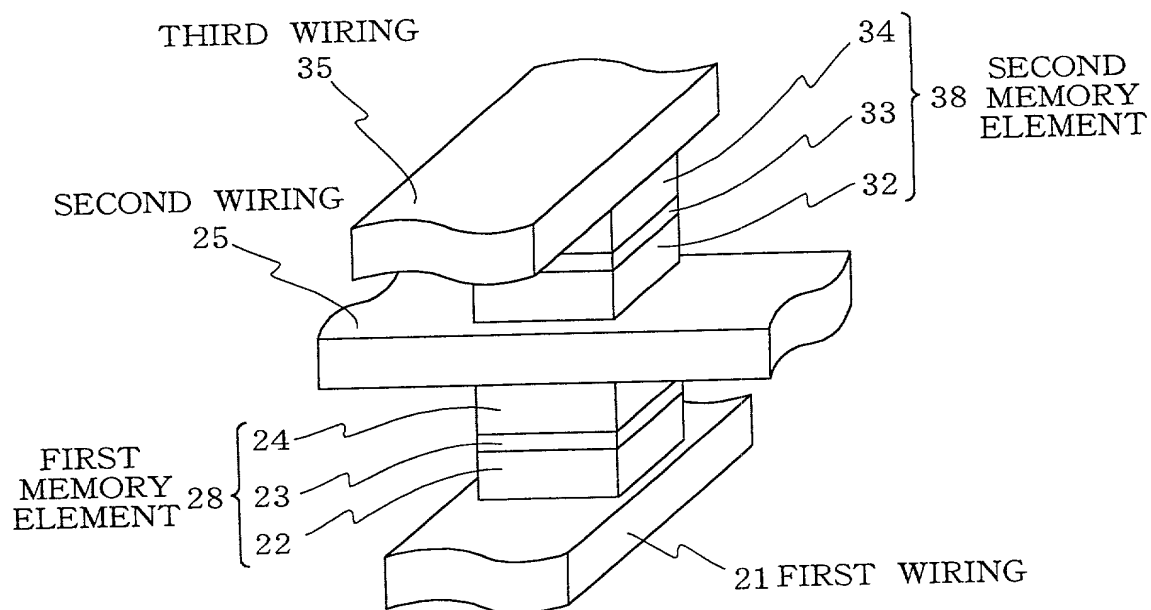
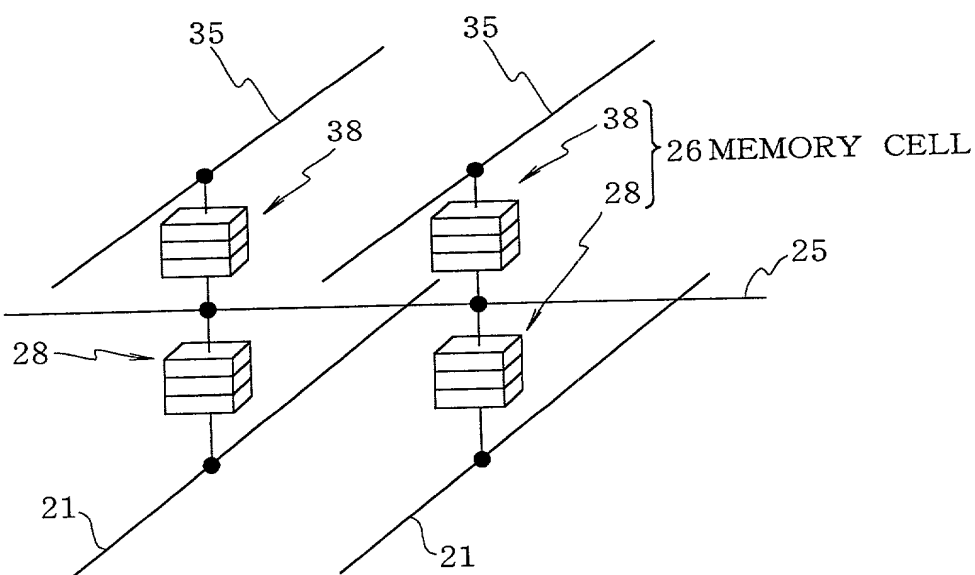
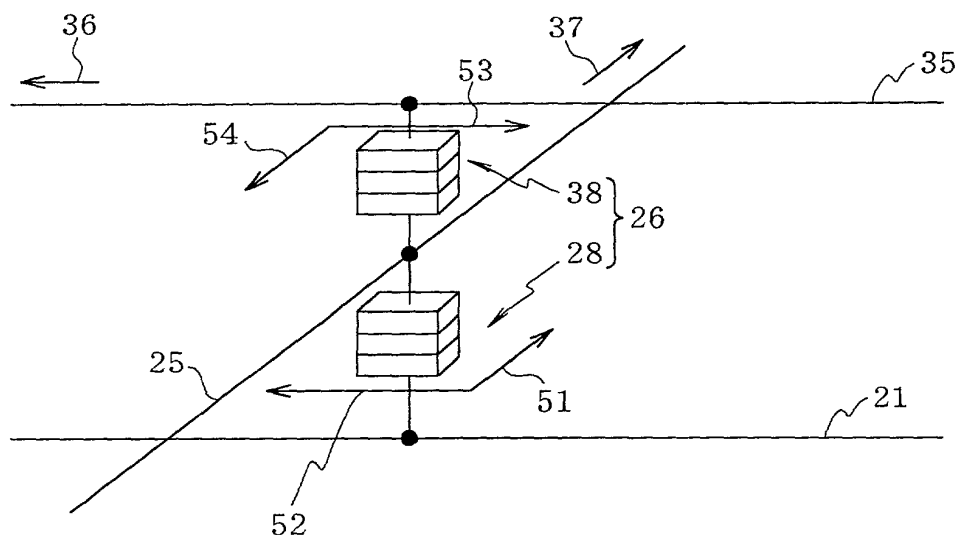
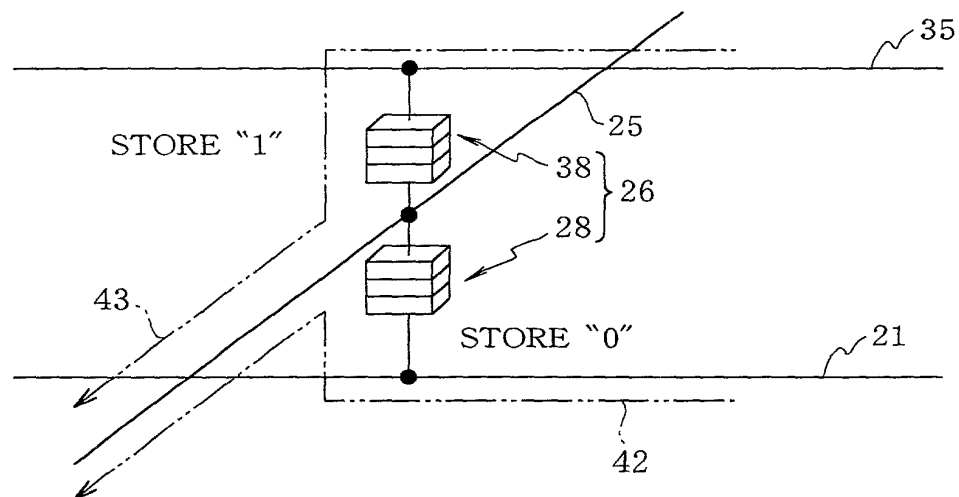
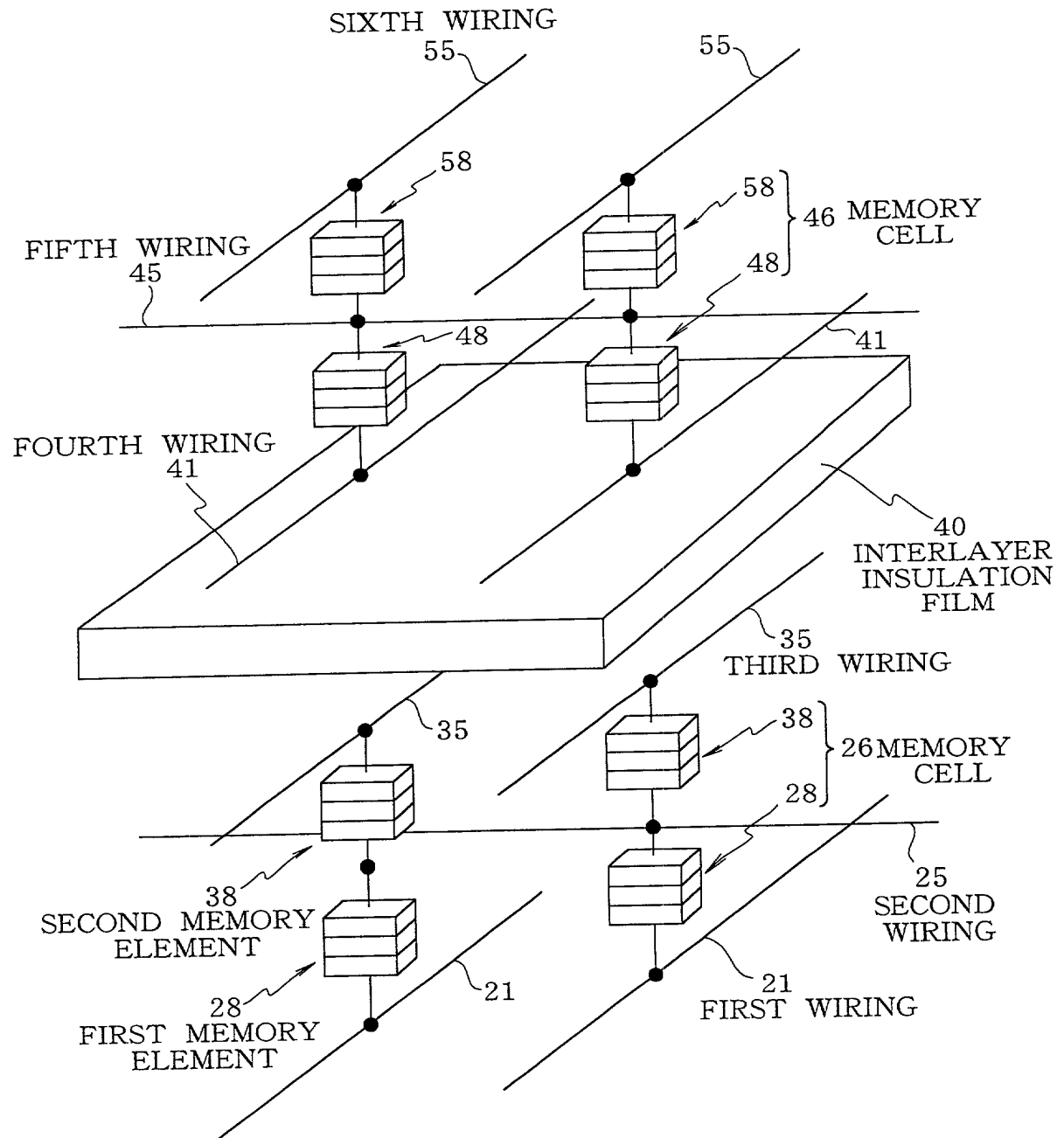


FIG.1(a)**FIG.1(b)**

22 : FIRST PINNED LAYER
 23 : FIRST INSULATION LAYER
 24 : FIRST DATA STORAGE LAYER
 32 : SECOND PINNED LAYER
 33 : SECOND INSULATION LAYER

FIG. 2(a)**FIG. 2(b)**

- 36 : FIRST DIRECTION
- 37 : SECOND DIRECTION
- 42 : READ CURRENT PATH OF FIRST MEMORY ELEMENT 28
- 43 : READ CURRENT PATH OF SECOND MEMORY ELEMENT 38
- 51 : MAGNETIC FIELD IN FIRST MEMORY ELEMENT 28
CAUSED BY FIRST WIRING 21
- 52 : MAGNETIC FIELD IN FIRST MEMORY ELEMENT 28
CAUSED BY SECOND WIRING 25
- 53 : MAGNETIC FIELD IN SECOND MEMORY ELEMENT 38
CAUSED BY SECOND WIRING 25
- 54 : MAGNETIC FIELD IN SECOND MEMORY ELEMENT 38
CAUSED BY THIRD WIRING 35

FIG. 3

48 THIRD MEMORY ELEMENT
58 FOURTH MEMORY ELEMENT

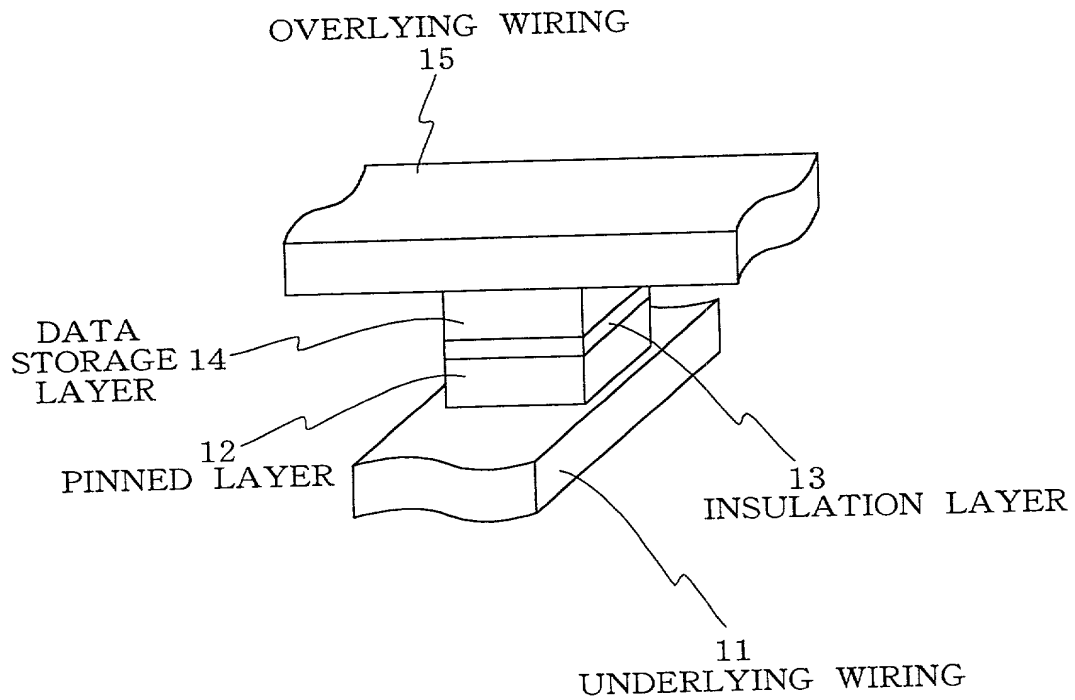
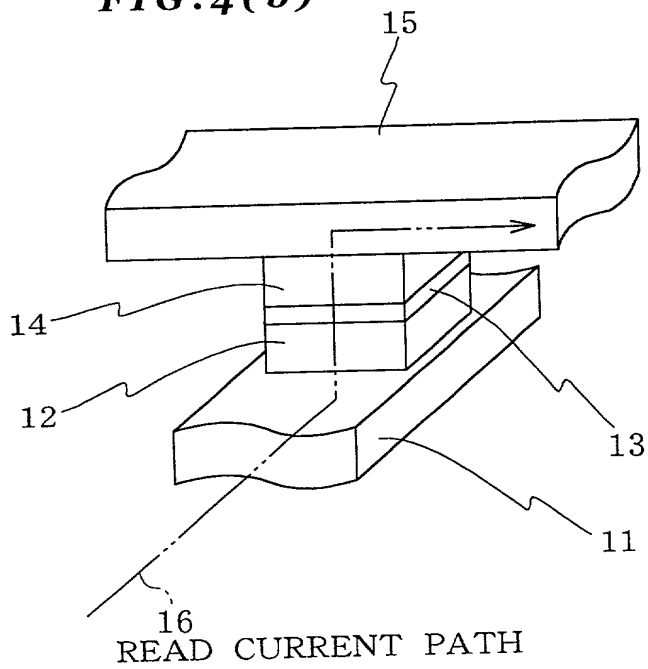
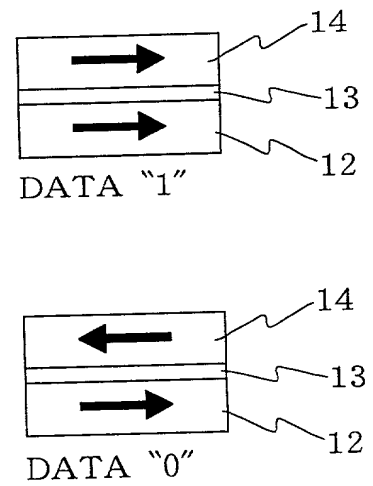
FIG. 4(a)**FIG. 4(b)****FIG. 4(c)**

FIG. 5

